THE GENESEE FARMER.

VOL. VII. ROCHESTER, N. Y. OCTOBER 7, 1837. NO. 40.

PUBLISHED BY LUTHER TUCKER.

TERMS.—The Farmer is published every Saturday, making an annual volume of 416 pages, to which is added a Title-page and Index, at the low price of $2,50, or $2,00 if payment is made at the time of subscribing.

☞ All subscribers must commence with the volume, Jan. 1, or with the half volume, July 1. No subscription taken for less than six months.

☞ THE MONTHLY GENESEE FARMER is made up of selections from this paper, and published on the first of each month, forming, with Title-page and Index, an annual volume of 200 pages, at the low price of FIFTY CENTS a year, *payable always in advance.*

GENESEE FARMER.

SATURDAY, OCTOBER 7, 1837.

Draining Land.

The necessity and advantages of draining must become more apparent, the longer the process of cultivation is carried on. On soils newly brought into use, as is the case in all countries when first settled, the surface contains such large quantities of vegetable matter that it is easily permeable to water, and this passing downwards to the more dense strata, flows off, leaving the exposed part comparatively dry. Prolonged cultivation exhausts this vegetable matter, and allows the earthy particles to approach each other more closely, thus, where clay predominates, preventing the sinking of the water, and compelling it to remain, or pass off on the surface. Repeated ploughings by pulverizing the soil has a tendency to clog, even in the more porous soils, the openings by which the superfluous water formerly passed freely off, making new channels necessary, or compelling the farmer to submit to the loss that must result from sowing or planting in a soil too wet for the proper germination and growth of plants.

The great object then of draining is to free the surface soil from the super-abundant water, no matter from what source it may arise, whether from rains or springs, and thus bring it into a state fit for the use of the farmer. There are some plants which will flourish with their roots or stems constantly submerged; but there are none of those cultivated by man, or which contribute in any considerable degree to his subsistence, that are adopted to such a state of existence. Rice approaches the nearest to this state, but too much water, or too long continued, is death even to this. Too much water renders plants pale and sickly; it so dilutes the food required by plants that they are not able to take up enough to properly perform the functions of growth and nutrition; and to expect vigorous healthy plants, or heavy well filled crops of grain on half submerged soils, is as idle as to expect robust individuals from children reared on broth administered to them in the infinitesimal doses of the Homopathic system.

Whatever then may be the method pursued in draining, all the means adopted should have reference to a single object, making the land dry; and the mode that most effectually accomplishes this result, is the one which should be preferred, unless the expense is such as to preclude its use. Lands which have a considerable declivity are never subject to injury from the moisture which falls upon them remaining in them; but side hills are as frequently damaged by waters that spring from beneath, as plains, and require draining as much or more, than nearly level lands usually do. To cut off these springs beneath the surface, and by collecting them into a single channel prevent the mischief that arises from the recurrence of 'springy places,' as farmers call them, draining properly conducted is effectual. There are few farms in the uneven parts of the country, on which the traveler cannot discover patches of coarse grass mixed up with sedge, and equisetum, producing nothing of value, and in their present state incapable of profitable cultivation. Draining here removes the moisture from the surface, and fits the soil for the reception of the finer grasses, by curing the sourness which must exist in such soils, or prepares it for the action of the plough and the culture of grain or roots.

Two kinds of drains are used, open and covered; and the kind to be preferred must depend on the nature of the case. If the object is to conduct a spring or stream of considerable size, open drains of suitable width and depth are usually best; there are but few places in which a stream of any magnitude can be conducted in a common covered drain, as the current will wash the sides or bottom, and by undermining the covering, cause it to fall in, and partially or totally obstruct the passage. Drains, whether open or covered, should be made considerable broader at the surface that at the bottom; though no definite rules can be given, as the danger of sliding in of the banks and filling of the drain depends on the nature of the soil in which it is constructed, Open drains are of course less costly than covered ones, but they are less beneficial to the soil, and generally less durable; as in cases where if open eighteen inches in depth would be thought sufficient, three feet at least will be required if the drain is to be covered or the soil submitted to the plough. Shallow open drains would be much more effectual, and less troublesome than they usually are, if the earth thrown up in excavating them, was removed from the bank on which it is now usually left piled, thus on one side at least preventing the free escape of the surface water, and by its pressure retaining that which would flow from below, as well as making an unsightly mound, which in meadows gives birth to a range of weeds, and by its unevenness hinders the free use of the sythe.

There can be no doubt, but that where circumstances will admit, covered drains are to be made in preference to open ones; they must be sunk deeper and therefore benefit the soil to a greater extent, and when properly made and covered, present no obstacle to the action of the plough, scythe or wagon. There are different modes of filling in, when dug, and here the nature of the soil must determine the best course to follow. If the substratum be hard and not liable to sinking, or washing away, a good method is to place flat stones by the sides of the drains, as supporters to others placed on the top, thus making a clear channel for the discharge of the water; but great care must be taken to place them in a position which shall prevent liability to fall, and consequent choking of the drain. With a hard bottom, some merely fill the drain to a suitable height with pebbles, on which is placed straw or turf, and the drain is there filled and levelled. If the quantity of water to be discharged is small, it will find its way through the interstices of the stones, and unless choked by the rotting turf or straw, remains good for an indefinite period. If the soil through which the drain is made is porous or of the nature of quicksand, one of the best methods yet adopted is to fill the drain with pine or hemlock brush or young saplings, the butt or large ends placed on the bottom of the drain and lapping on others, the more erect the position when placed in the drain the better, as when pressed down and the earth filled in upon them the more free will be the discharge of the water. Such a filling is very durable, as few men will live to see hemlock or pine branches, placed in such a position, and consequently wet, decay.

Ditches, or open drains to serve the purposes of a fence are much used in some parts of England and the European continent, and we doubt not can be made to answer a valuable end in many parts of our own country. A large part of the low prairies of Indiana and Illinois, are based on clay, and one of the most serious inconveniences under which a large part of those states labor, is the want of materials for fences. In prairies of this nature a ditch four feet in width by three feet in depth, the excavated clay carefully placed in a wall like form on one side, would present an obstacle which few animals would choose to encounter: especially, as if desired, the ditch might be kept nearly or quite full of water for a considerable part of the year.

Fortunately, draining of land, requires but little scientific skill in ordinary cases to conduct it successfully. The ordinary flow of the surface water usually determines the direction and descent of the drain; and levelling, except such as is already performed by nature, is rarely necessary. Unless the structure of the country and nature of the strata are very uniform, some little care may be necessary to determine the strata that contain the springs required to be cut off; but where there is the least doubt, sinking a pit, or boring, will at once settle the point. As a general rule a drain intended to cure land rendered wet and cold by springs, should be cut as near where they make their first appearance as convenient, but rather above, than below. Drained and reclaimed swamps invariably make the richest of land, as they have for uncounted centuries, served as the places in which the spring floods, and the summer rains have deposited their most valuable treasures, and when freed from their super-abundant water, are ready to repay four fold the labor bestowed upon them.

There are some lands naturally dry, but which from their position are liable to submersion during heavy rains, and sometimes to such an extent, as materially to injure the productions of the soil. Here nothing is necessary but to open channels which have a sufficient descent to enable the waters to flow off freely from the surface. We have known a few deep furrows, kept open, prove sufficient to drain meadows liable to this partial overflowing and nearly double the value of the grass produced by them. Such furrows, however, avail little or nothing where the water springs from the soil; and here deep drainings, effectually performed, will be the only beneficial course, and in the end unquestionably be found the cheapest.

Preservation of Potatoes.

The experience of the present year proves that it would be very desirable to preserve potatoes not only from the effects of the frost, but from the deterioration they are sure to undergo from sprouting and drying up, when exposed to the increased temperature of spring and summer. Potatoes ripe and fit for use cannot in general be expected before the first of August, though some of the early varieties may be had for cooking before that time, if proper precautions are taken, and under usual circumstances, old potatoes ere that time of the year will be mostly worthless.

The laws which regulate vegetation are such that if a seed or plant is kept at a state but little above the freezing point, growth cannot ensue; and hence experience shows that roots placed in the ground, as they have sometimes been by accident, at such a depth that the genial influence of the sun can produce little or no effect on them, can be preserved sound for indefinite periods of time. Profiting by the suggestions these facts afforded, Mr. DeLancy buried some potatoes of the preceding years growth in his court yard, in a hole two and a half feet deep, under the protection of a south wall, where the sun shone but a small part of the day. The potatoes were buried in March, and about eleven months afterwards, the hole was opened, and to his surprise and pleasure, he found that, two or three of the roots excepted, which were perforated by worms, though sound, all were perfectly hard and firm without having the least symptom of vegetation, and in every respect as fit for planting or the table as new potatoes.

We wish that some of our farmers the coming autumn would repeat this experiment; since if it should succeed here, one very great means of securing health and comfort, by substituting firm mealy potatoes for the wilted leaden roots inflicted upon us for two or three months of every year, would be obtained. Perhaps a soil naturally dry, so that the roots should not be too much exposed to accumulated moisture would be preferable; and as in the above experiment of DeLancy's, a spot with a northern exposure, or one as little subjected to the influence of the sun as possible, should be selected.

The Locust.

Many persons have been deterred from attempting the culture of this valuable tree, from the supposed difficulty of causing the seeds to vegetate or grow, and we a number of years since entirely lost the labor of procuring and planting a fine lot of seeds, not one, to our knowledge, having ever germinated. But since we learned from Judge Mitchell of Long Island, his mode of preparing them, we have had no more difficulty with the locust, than with the apple. It consists simply in having your ground ready for the reception of the seed, and then turning boiling water upon them and suffering them to stand 24 hours: those that are swelled, are now to be separated and planted, and more hot water turned on the remainder, and this repeated as often as necessary. We last spring sowed a small piece, the seed germinating without difficulty, and the trees now standing from eighteen inches to two feet in height. A deep loamy or gravelly soil is the best adapted to the locust, but it will grow on any soil where the oak flourishes freely.

Insects from Flint.

In a late number of the Farmer we gave an account of the experiments of Mr. Crosse, on the effect produced by long continued galvanic action with a solution of silex or flint, in the formation of insects. Prof. Silliman's Journal for July, contains a more complete history of the experiment, and the astonishing result, with cuts representing the appearance of the insects so produced, highly magnified. In a note at the close, the Prof. says,—"We cannot believe that life and organization have been produced by galvanic power, but would sooner suppose that the ova of the insect may have been contained in the materials galvanized, or come into them during the process, and that the galvanic power may have quickened them into life, as electricity and animal warmth operate upon eggs."

Mr. Crosse, as we learn from a late number of the London Atheneum, is intently pursuing his galvanic researches, anddeveloping the mighty energies of a power which under the names of electricity, galvanism, or magnetism, promises to effect many mutations in science, if not in the long received opinions of mankind. Unless we much mistake, a clue has been found, that will unravel the mysterious agency that certain of the salts possess in exciting vegetation, salts naturally existing in the earth or formed by the fermentation and decomposition of animal matter. We shall wait the further researches of chemical science on this subject with much interest.

Mammoth Pumpkin.

We saw on Friday, at the store of Mr. Phillip Wilcox, a Pumpkin raised in his garden this season, which weighs 123½ pounds, measuring in circumference six feet two inches! It is of handsome size and color, and of a kind said to be good for pies. Mr. W. says it grew from the blossom in ten weeks. —*Springfield (Mass.) Rep.*

Greater than Mammoth Pumpkins.

We have seen at Messrs. Reynolds & Bateham's Seed Store, some pumpkins, which for size and solidity surpass every thing of the kind which we have witnessed, and we might challenge even old Massachusetts to produce their equal.

The largest measures *seven feet* in circumference and weighs ONE HUNDRED AND SIXTY-SIX POUNDS. Another measures *six feet* and weighs ONE HUNDRED AND THIRTY-THREE POUNDS. Both of these together with a third one (which was destroyed,) as large as the second, all grew on one vine, making an astonishing aggregate of more than 400 lbs. from a single plant. *Genesee against the world!*

They are called Spanish cheese pumpkins, and may be seen, together with a great variety of fine pumpkins and squashes which are for sale, at the Rochester Seed Store, Arcade Hall.

MAMMOTH PRODUCTIONS.—The Fort Wayne (Indiana) Sentinel mentions corn 15 feet high, stout and well-eared in proportion. This is said to be not uncommon in "those parts." Col. Swinney's farm near that place is said to average 90 bushels per acre for a hundred acres. "What do you think of this, ye down-easters!" exclaims the Indiana Editor.

A cabbage in the garden of D. Hamilton of Orange co., N.Y., measures 4 feet 8 inches! in diameter and is yet growing. The Goshen paper says "This is a most extraordinary production, and quite equal to the field of corn, which will yield, in many cases, *six ears* to the stalk of the small *eight row'd* corn." The seed of such mammoth productions should be widely scattered.

The Geneva Gazette mentions some onions raised from seed this season, measuring each 14 1-2 in circumference—a blood Beet, measuring 17 1 4 inches around, and a Pumpkin of the common kind, which measures 48 3 4 inches one way, and 52 1-4 inches the other, and weighs 45 1-2 pounds.

☞Some peaches with which we have been presented from the garden of Capt. H. Stillwell, weigh 5 ounces. The coolness of the season is unfavorable for the peach crop.

SUGAR-BEET is extending in cultivation. Lot Pugh at Cincinnati is doing wonders in that line—his crop now being better than last year, when it was over 50 tons to the acre. These 50 tons are said to be easier raised than 50 bushels corn, and are excellent for all kinds of stock. Like the turnip-crop of England, the sugar-beet is destined to become one of the richest acquisitions of Agriculture.

OATS having upwards of 300 grains in the head are mentioned in the Penn-Yan Democrat, and "the world is challenged to produce their equal." The heads of oats furnished us by Dr. Dwight of Moscow, Liv. co., and now in our office, counted from 400 to 480. It is gratifying to perceive the attention bestowed on this crop.

A new Grape.

MR. TUCKER—I wish through the medium of your paper to introduce a new variety of the Grape to the public. Its great value consists in its early maturity; ripening at least a fortnight before the *Isabella*, and of a flavor more agreeable to many tastes; being devoid of pulp and musk, or fox grape flavor, perfectly hardy, a very prolific bearer and strikes freely from cuttings, a free and luxuriant grower, and rejoices in a plenty of *elbow-room*.

The clusters are a good size, pretty closely set, the fruit round and of a dark purple color, not unlike in size and color to the *Munier*. They endure cold well without dropping from the vines; in fact frost renders them particularly sweet like the frost grape, of which they are probably a hybrid.

My brother, L. B. Langworthy of your city, has the credit of introducing it, and who has grown it for 3 or 4 years, and calls it the *Clinton*.

I send you a sample of its fruit, and also some to the Seed Store of Reynolds & Bateham, for the inspection of connoisseurs in that line.

I have a few roots fit for setting in my nursery, and intend propagating it on an extensive scale, under the conviction that if our seasons are not more propitious, it is the only grape that will give a return equal to the labor of cultivation. H. N. LANGWORTHY.

Brighton, Monroe co. N. Y.

From the Practical Farmer.

Cultivation of Grasses.

In the modern and improved system of husbandry, the cultivation of a farm may be considered under two heads; the *grass* and the *arable* land.

The convertible system of husbandry, is where land is converted from tillage to grass, and then again from grass to tillage, and so on, alternately. The advantages to be derived from this practice says a writer of authority, (Sinclair,) cannot be too much dwelt on. By the grain crops, a sufficient quantity of straw is provided, partly to be used as food, but principally to be employed as litter for cattle, while at the same time, a fair profit is to be derived from the grain. By the grass and green crops, a number of domesticated animals are maintained both in summer and winter; and when they are abundantly littered, as well as fed, a regular and sufficient supply of valuable manure is secured. Hence it is that alternate crops for the food of man, and of the inferior animals, is in general, indispensable for the profitable production of both corn, and of animal food, on all soils susceptible of cultivation.

On the subject of cultivating the grasses, we shall take for our guide, an authority we have before acknowledged.

Judge Buel has given a classification of the grasses, the seeds of which can be procured in this country, and pointed out the soils on which they respectively thrive. He divides them as follows:

1. Grasses best suited to arable lands, and designed to alternate with grain and roots.
2. Those best adapted for hay or meadows; and
3. Grasses which are most profitably sown for perennial pastures.

1. There are several descriptions of land, which are much more profitably employed in tillage than in grass, particularly those that are dry or light, and which have little tendency to produce good herbage. Yet constant cropping with grain would soon exhaust them of fertility, without an expense for manure which few can afford. The system of introducing artificial or sown grasses, after two, three, or four years' tillage, is happily calculated to avert the evil, and constitute the basis of most of the late improvements in arable husbandry, as well as farm stock.

The grasses best calculated for this purpose, are red and white clovers, lucern, sanfoin and the orchard, tall oat, timothy, and rye grasses.

Clover is the primary dependence on all soils which will grow it, and particularly where gypsum can exercise its powers. As vegetables are said to exhaust the soil in proportion to the smallness of their leaves, clovers are entitled to the high commendation they have obtained among American farmers. But as these plants are liable to premature destruction by the frosts of winter, it is prudent and wise to intermix with their seeds, those of some other grass more to be depended on.

On *sands*, *light loams*, and *gravels*, (and these constitute the soils usually employed in convertible husbandry,) the orchard grass, or tall meadow oat grass, appears best calculated for this purpose. They grow early, delight in a clover soil, and are fit for the scythe when clover is in bloom, the period at which it ought to be made into hay. The hay from this mixture, may be made before the harvest commences; and if the soil is good, a second crop may be cut almost equal to the first. If extended for pasture the second or third year, either of these grasses will afford more abundant herbage than timothy. Lucern may be sown on deep sand loams; and sanfoin on dry soils, naturally calcareous, or on those which have been rendered so by marl or lime.

On *clays*, and *heavy loams*, timothy may be sown alone, or those grasses named in the preceding paragraph, separate or mixed.

On *wet soils*, and reclaimed swamps, as the only object of tillage *ought to be* to prepare the ground to be laid down in grass, the kinds indicated in the preceeding remarks as suitable for such soils, and intended for meadow grasses, should be selected; yet so scanty is our assortment that we can only name timothy and herdsgrass.

2. MEADOWS.—These may be classed under three heads, viz: low, or alluvial lands, on the banks of rivers, creeks, and brooks; uplands, naturally moist,

or of clay, or heavy loam; and reclaimed bogs and swamps. These soils, to adopt a common term, are *natural to grasses*, while the expense of tillage, and the uncertainty of a crop, render it most proper to appropriate them to grass. The objects in stocking meadows, are, to select those grasses which *yield the greatest burthen of hay*, and *afford the most nutriment for cattle.*

When mixed seeds are employed, care should be taken to select those which can be most profitably cut at the same time, the impropriety of mixing timothy and orchard grass, for instance, will be apparent, from observing that the last should be cut in the latter end of June, while the former continues to improve till the last of July.

Timothy is undoubtedly the best grass which can be employed for meadows on moist or tenacious soils. Herdsgrass and rough stalked meadow grass, often come in spontaneously. And if the timothy is left standing until it is ripe, seeds enough fall to supply new plants.

For *light loams*, *sands*, and *gravels*, the tall oat and orchard grasses are probably the best, and to these may be added, red and white clover.

The great difficulty is, to prevent the deterioration of meadows. This takes place from the better grasses running out, and giving place to coarser kinds, to moss, and to useless and noxious plants; aided often by a neglect to keep them well drained. The finer and most nutritious kinds thrive well in *moist*, though but few will live in *wet* soils. It is therefore of the first importance, to keep the surface soil free from standing water, by good and sufficient drains; and it often becomes necessary to lay the land in narrow ridges, at right angles with the ditches. Another precaution to be observed is, not to depasture them with heavy cattle when the ground is wet and poachy.

Harrowing in the Fall, has been found beneficial to meadows. In Europe, top dressings of lime, marl, compost, ashes, and yard manure, are repeated at intervals of two or three years. With us, the annual application of a bushel of plaster of Paris, is found beneficial on most lands not absolutely wet. Stable manure should be applied only when it can be spared from the more profitable uses of tillage, and is far more beneficial mixed with the soil, than spread upon its surface. Its most economical application is in the form of compost, made by mixing it with bog earth, river sand, the wash from the highways, or other rich earth, at the rate of one load of dung to five or six of earth. If turned and mixed well, this constitutes a valuable top-dressing for grass grounds, and is best applied in the Autumn. When these means fail to insure a good crop of hay, it is time to resort to the plough, a course of crops, and re-seeding.

3. Pastures.—Here the object is to obtain those grasses that are nutritious, relished by cattle, and which supply green feed from March to December, or such a mixture as will give a succession of fresh herbage during the grazing season.

The tall oat, rye and orchard grasses, are best adapted to the lighter and drier soils, where the spontaneous growth of clovers and other indigenous grasses, should be encouraged by top dressings, or the application of plaster. In moist and stiff grounds, timothy and herdsgrass may be sown with the tall oat.

The observations under the preceding head, in regard to draining, top-dressing, sowing seed, and harrowing, lose none of their force when applied to pasture grounds. It is believed that if once introduced upon our farms, the valuable grasses which we want, would propagate themselves.

The number of grasses is very great. It is said that 215 properly so called, are capable of being cultivated in Great Britain. Judge Buel has given an account of twenty-five, foreign and domestic, and exhibited in a tabular view their comparative value, as indicated by their product, and the quantity of nutritive matter which they severally afford, together with the time of their flowering and seeding. For particulars, the reader is referred to the paper in the third volume of the Memoirs of the Board of Agriculture.

Another paper in the Memoirs, by S. De Witt, Esq., says: In laying down grounds for pasture lands, the English select the seeds of such grasses as will come to maturity in succession; but I think they carry this scheme to excess, and that there is no necessity for a mixture of such a variety of seeds to be used for these purposes. In our country, the most esteemed grasses are, white and red clover, timothy, or herdsgrass, the red top, and foul meadow. With these some other indigenous grasses intermix, the merits of which deserve to be investigated. Our best grasses for meadows, are unquestionably the timothy, the red top, and the foul meadow. The merits of this last are not generally known. There can be no better hay than that which is made from it. On a rich, moist soil, it will grow uncommonly dense, and I should think, would yield as much from an acre, as any other of the best cultivated grasses.

From the Quarterly Journal of Agriculture.

On Making Meadow Hay.

BY PATRICK MILLER, ESQ.,

Late of Dalswinton, Dumfries-shire.

Making hay is universally allowed to be one of the most important branches of agricultural pursuits, but the principle on which it should be conducted, is not at all understood on this side of Tweed.

In England, however, the operation is very differently performed, and with very different and more satisfactory results; for by their system, a great deal of time is saved at a critical period, and a far superior article of food for their animals is produced.

Besides the great and necessary despatch which is used in England, much skill is also employed to produce and maintain a requisite degree of heat or fermentation in the stack when the hay is put up, in order to convert the juice of the herbage to a saccharine state, which is found to be both more palatable, and likewise more nutritious to all bestial that is fed upon it.

In Scotland, on the other hand, it would almost seem as if diligence was employed to unnecessarily procrastinate the work, and subject it to the risk of unfavorable changes of the weather; and by the excessive bleaching and drying of the grass, which is so universally practised, it is deprived of the possibility of assuming the saccharine quality; and what sap is permitted to remain in it, is converted to starch, which is neither so agreeable nor nourishing for horses, as hay made upon the principle which I am anxious to recommend, and from whence arises, as is easily to be perceived, a greater waste of hay in Scotch than in English stables.

Having premised this much, I proceed to detail the practice which I have pursued for many a bygone year on my farm, which, being on a limited scale, shall therefore confine my description to the narrow compass of my own operations, but which of course, easily admits of being extended to a larger field as circumstances may require.

When the hay season arrives, and the weather is favorable, and when I perceive, by the height of the column of mercury in the barometer, and likewise from the appearance of the skies, that there is a likelihood of its continuing so, I set a couple of mowers to work very early in the morning, each attended by a boy or girl about 12 or 13 years of age, and, as soon as the men have made half a dozen cuts of the scythe, the two boys or girls take up the swath and shake it out as thin as possible on the ground where it grew, there to lie and wither till after breakfast.

On the return of the mowers from their breakfast, a stout, active woman begins to turn with a rake, *in the direc ion of the sun*, the grass which was first shaken out, the men and the boys cutting down and shaking out in the same way as in the morning.

When the woman has finished turning the early cut grass, she immediately goes to the spot where she began, and shakes it out again as thin as she can, and when finished, she commences turning by large rakesfull, where the mowers resumed their work after breakfast, and commences her task in the same manner as when she began in the morning, always turning as already said *in the direction of the sun.*

On the people returning to the field from their dinner, the two boys immediately begin to shake out that part of the second turned grass, which had not been accomplished before going to dinner, and when that is finished, they commence turning what was last cut, and then shake it all out again.

At this period the two mowers and the woman proceed to rake the first cut hay into what is called a windrow, and one of the men commences with a pitchfork, to put it into cocks of about ten or twelve stones weight, and between five and six feet in height, but on no account is a foot permitted to go upon it, for it cannot be put up too light, neither is it to be roped, for if the weather is calm, a few hours after it is in the cock, it will be so compact itself, that it will require a violent wind to overturn it.

Thus the hay which was cut in the course of the day, will be, through this mode of treatment, sufficiently dried and secured by the evening, against any change of weather which may occur in the course of the night,, and it will stand exposure to a storm full as well as the hay which is so sadly mismanaged by the improper system at present in use.

So far the process only relates to getting quit of the redundant sap in the herbage, but if the hay gets rain or any adventitious moisture, either in working or stacking, it must be carefully dried off before being put into the stack, or so brisk a fermentation will ensue, that combustion will infallibly take place.

The next part of the operation is stacking the hay, and this may take place, if the weather continues fine, on the second or third day after the last cock was put up.

In making this kind of hay, the great and important object is to get it to ferment or heat in the stack, for the purpose of making it evolve its saccharine quality, as in the malting of grain, and is effected as follows:

If a round stack is intended, let a common sack be well crammed full of hay or straw, and placed erect on the foundation where the stack is to be reared, and then begin building all around it with the first cut cocks, intermixing now and then a few of those last put up, in order to promote the fermentation; and when the stack gets as high as the top of the bag, the worker pulls it straight upwards, and so continues working around and pulling it up till the stack is finished, and in this way a chimney is formed for the escape of the nascent gas.

Should a long stack be preferred, then a chimney must be brought out at the peak at each end, and one in the middle by the same means, if a large mass of hay is put up in the stack; and in conclusion, I recommend that these vents shall not be closed for a month, or while any perceptible fermentation is going on.

Cheap Thrashing Machines.

We observe by an advertisment in the New York Evening Star, that a Mr. E. Warren of that city has thrashing machines, made in the strongest manner of wrought iron and wood, which are represented as not being liable to get out of order, and thrash all kinds of grain equally well, which he sells at from $20 to $40 dollars a piece. Machines at $25 and $30 with one or two horses will thrash from 80 to 160 bushels of wheat per day—those at $40 designed for large farmers, thrash from 200 to 300 in the same time. If those machines will do the work here represented, they are certainly cheap, for there is no more necessary implement on a farm, whether the economy of time or money be considered.

We have mentioned these articles with a view of asking our kind friend of the New-York Farmer to ascertain and publish in his next paper, what is the cost of the horse power by which these machines are propelled. If that be correspondently low, we should say that Mr. Warren will merit the thanks of the agricultural community. Although all acknowledge the superiority of the manner of getting out grain by a thrashing machine over that of the *flail*, or the more slovenly way of *treading* it out by horses, yet the expense of the former has hitherto deterred many small farmers from procuring one. —*Farmer and Gardner.*

The Northampton Silk Company succeed well in making Sewing Silk. The lustre and delicacy of the thread, and the fineness of its texture, are not surpassed by the best Italian. So say competent judges.

COMMUNICATIONS.

A great number of horses die annually of the scours. The following recipe having been used with success in a number of cases, I am induced to send it to you for publication, and you will please publish it with my signature attached, as I am always fearful of recipes to which there is not a name, unless the editor will vouch for their good qualities; and I will also send for publication a recipe which I have used for making my own opodeldoc. I am not a farmer, but having used this and the opodeldoc of the Druggists, I give this the preference.

—

Recipe for Scours in Horses.

If the horse is in a good condition, take 2 or 3 quarts of blood, and then take 1 ounce each Anise seed, Caraway seed, and Grains of Paradise in powder, and 1-2 oz. Aromatic Confection, and 2 ounces Balsam of sulphur; beat the Balsam of sulphur up with the yolk of an egg, then mix the powders and give the whole in a pint of warm gruel with a wine-glass of brandy and 2 table spoons-full of sugar, and give the above mixture once a day for three days in succession.

S. Porter Rhoades,

—

The following composition is very good to remove a swelling on horses.

Hogs lard, oil Vitirol, and spirits of Turpentine, mixed; sufficient oil of Vitirol must be put in to make the composition a dark brown color, and rub the part affected twice a day with a small quantity at a time.

The above recipe I have not used myself, and am only able to recommend it from the report of others.

—

To make Liquid Opodeldoc.

Take 2 quarts Whiskey or Cider Brandy, and put it in a kettle and warm it, (be careful it does not take fire) put in as much common soft soap as it will dissolve, then botttle it and add one ounce of Gum Camphor, 1-2 ounce Sal Ammonia, 2 ounces Oil Origanum, and 1-2 ounce Oil Wormwood. S. Porter Rhoades

Great Yield of Oats.

Mr. Tucker—Inasmuch as it hath seemed good unto many persons to publish statements of the wonderful produce of the common Oat, I have thought it to be no more than right that my favorite Siberians should come in for a share of the public approbation. Passing through my oat stubble a day or two since, I found a few straggling heads that looked very long, and took pains to pull up a root that had eight stalks, and standing at least four feet from any other stalk and could not have been the produce of more than one oat. Perceiving that each stalk was well filled, I took pains to shell and count each head by itself. Upon the longest head, which was seventeen inches long, there was 332 oats—and upon the whole eight stalks there were 2,193 oats, and all these the produce of one oat. This may seem an incredible number to those unacquainted with the Siberians, and they may think that the eight stalks were not the produce of one oat. The Siberian is remarkable for spreading when it has room. I have found fifteen stalks from the same root. It resembles in this respect, orchard grass. The oats grow all around the stalk, and none of them are more than an inch from it, and much resemble in appearance a plume.

Specimens of these heads of oats may be seen at the Rochester Seed Store. Yours, &c.

East Bloomfield, Sept. 28, 1837. O. P. Q.

Another Great Yield of Oats.

Mr. Tucker—Having seen in a late number of the Genesee Farmer, an account of the number of kernels from a single kernel of oats raised by an Onondaga farmer—also stating that if any of the Genesee farmers could beat it, to let them. I send you the following for insertion. On the farm of Robert Clark, there grew from one kernel, eleven stalks, which produced 2,637 fair plump kernels. The number of kernels from one stalk that I counted was 443, another 440.

The oat crops has been very good this season in this section of the country, and I should judge from the quantity of land sowed, and the great yield, that there is a third more oats this season in this vicinity then was ever raised here before in one season. He sowed one piece which was ploughed the last of April, and sowed the first of May, of clover sod, containing 1¾ acres, from which was cut 63 dozen of large bundles, which would yield two bushels and rising to the dozen, and at the rate of 75 bushels to the acre at least. He raised 3 acres more, which would yield 50 bushels per acre.

Geneseo, Sept. 27, 1837. A Genesee Farmer.

From the Horticultural Register.

Of the Analysis of Soils, and of the Agricultural Relations between Soils and Plants.

We have seen that the earths have a threefold capacity: that they receive and lodge the roots of plants and support their stems; that they absorb and hold air, water and mucilage—aliments necessary to vegetable life; and that they even yield a portion of themselves to these aliments. But we have also seen that they are not equally adapted to these offices; that their parts, texture, and qualities are different; that they are cold or warm, wet or dry, porous or compact, barren or productive, in proportion as one or other may predominate in the soil: and that to fit them for discharging the various functions to which they are destined, each must contribute its share, and all be minutely divided and intimately fixed. In this great work nature has performed her part: but as is usual with her, she has wisely and benevolently left something for man to do.

This necessary march of human industry, obviously begins by ascertaining the *nature of the soil.* But neither the touch, nor the eye, however practised or acute, can in all cases determine this. *Clay* when wet, is cold and tenacious—a description that belongs also to magnesian earths; *sand* and *gravel* are hard and granular; but so also are some of the modifications of lime; *vegetable mould* is black and friable, but not exclusively so: for schistous and carbonnaceous earths have the same properties.

It is here, then, that chemistry offers herself to obviate difficulties, snd remove doubts; but neither the apparatus nor the process of this science, are within the reach of all who are interested in the inquiry, and we accordingly subjoin a method, less comprehensive, but more simple, and sufficiently exact for agricultural purposes, and which calls only for two vases, a pair of scales, clean water, and a little sulphuric acid.

"1st. Take a small quantity of earth from different parts of the field, the soil of which you wish to ascertain, mix them well together, and weigh them; put them in an oven, heated for baking bread, and after they are dried, weigh them again; the difference will show the *absorbent power of the earth.* When the loss of weight in 400 grains, amounts to 50, this power is great, and indicates the presence of much animal or vegetable matter; but when it does not exceed 20, the absorbent power is small, and the vegetable matter deficient.*

"2d. Put the dried mass into a vase with one-fourth of its own weight of clear water; mix them well together; pour off the dirty water into a second vase, and pour on as much clean water as before; stir the contents, and continue this process until the water poured off is as clear as that poured on the earth. What remains in the first employed vase, is *sand, silicious* or *calcareous.*

"3d. The dirty water, collected in the second, will form a deposit, which (after pouring off the water) must be dried, weighed, and *calcined.* On weighing it *after* this process, the quantity lost will show the portion of *animal* and *vegetable mould contained in the soil;* and

"4th. This calcined matter must then be carefully pulverized and weighed, as also the first deposit of sand, but without mixing them. To these, apply (separately) sulphuric acid, and what they respectively lose in weight, is the portion of *calcareous* or *aluminous earths* contained in them.—These last may be separated from the mass by soap lye, which dissolves them."*

Here is the light we wanted. In knowing the disease, we find the cure. Clay and sand qualify each other; either of these will correct an excess of lime; and magnesia earth, when saturated with *carbonic acid*, becomes fertile.

But entirely to alter the constitution of a soil, whether by mechanical or other means, is a work of time, labor, and expense, and little adapted to the pecuniary circumstances of farmers in general.—Fortunately, a remedy, cheaper, more accessible and less difficult, is found in that *great diversity* of habits and character, which mark the vegetable races. We shall, therefore, in what remains of this section, indicate the principal of these, as furnishing the basis of all rational agriculture.

1st. Plants have different systems of roots, stems, and leaves, and adapt themselves according to different kinds of soil. The Tussilago prefers clay; the Spergula, sand; Asparagus will not flourish on a bed of granite; nor Muscus Islandicus on one of alluvion. It is obvious that *fibrous rooted* plants which occupy only the surface of the earth, can subsist on comparatively stiff and compact soils, in which those of the leguminous and cruciform families would perish, from inability to penetrate and divide.

2d. Plants of the same or of a similar kind, do not follow each other advantageously in the same soil. Every careful observer must have seen how grasses alternate in meadows or pastures, where nature is left to herself. At one time timothy, at another clover, at a third red top, and at a fourth blue grass prevails. The same remark applies to forest trees; the original growth of wood is rarely succeeded by a second of the same kind; pine is followed by oak, oak by chestnut, chestnut by hickory. A young apple tree will not live in the place where an old one has died; even the pear tree does not thrive in succession to an apple tree; but stone fruits will follow either with advantage. "In the Gautinois, (says Bosc,) saffron is not resumed but after a lapse of twenty years; and in the Netherlands, flax and colzat require an interval of six years.—Peas, when they follow beans, give a lighter crop than when they succeed plants of another family."†

3d. Vegetables, whether of the same family or not, having a similar structure of roots, should not succeed each other. It has been observed that trees suffer considerably by the neighborhood of sainfoin and lucerne, on account of the great depth to which the roots of these plants penetrate—whereas culmiferous grasses do them no harm.

4th. Annual or biennial trefoils prevent the escape of moisture from sandy and arid soils, and should constantly cover them in the absence of other plants; while *drying and dividing crops*, as beans, cabbages, chicory, &c., &c., are best fitted to correct the faults of stiff and wet clays.

5th. When plants are cultivated in rows or hills, and the ground between them is thoroughly worked, the earth is kept open, divided, and permeable to air, heat, and water, and accordingly receives from the atmosphere nearly as much alimentary provision as it gives to the plant. This principle is the basis of the drill husbandry.

6th. All plants permitted to go through the phases of vegetation, (and of course to give their seeds,) exhaust the ground in a greater or less degree; but if cut green, and before seeding, they take little from the principle of fertility.

7th. Plants are exhausters in proportion to the length of time they occupy the soil. Those of the

* See Davies' Elements.

* This method of analyzing soils is that described by M. Bosc, member of the Institute of France, &c., and recommended to French agriculturists.

† The ill effect of a succession of crops of the same kind was not unknown to the Romans. We have proof of this in the following passage of Festus: Restibilis ager fit qui continuo biennio seritur farreo spico, id est aristato, quod ne fiat *solent, qui pradia locant, excipere.*

culmiferous kinds (wheat,* rye, &c.) do not ripen under ten months, and, during this period, forbid the earth from being stirred; while, on the other hand, leguminous plants occupy it but six months, and permit frequent ploughings. This is one reason why culmiferous crops are greater exhausters than leguminous: another is, that the stems of culmiferous, become hard and flinty, and their leaves dry and yellow, from the time of flowering till the ripening of the seed—losing their inhaling or absorbing faculties—circulating no juices, and living altogether in their roots, and on aliments exclusively derived from the earth; whereas leguminous or cruciferous plants, as cabbages, turnips, &c. &c., have succulent stems, and broad and porous leaves, and draw their principal nourishment from the atmosphere. The remains of culmiferous crops also are fewer, and less easily decomposed, than those of the leguminous family.

8th. Meadows, natural and artificial, yield the food necessary to cattle, and, in proportion as these are multiplied, manures are increased, and the soil made better. Another circumstance that recommends them is, that so long as they last, they exact but little labor, and leave the whole force of the farmer to be directed to his arable grounds.

9th. Grasses are either fibrous or tap-rooted, or both. The remarks already made, in articles 1, 2, and 3, apply also to them. Timothy, red top, oat grass, and rye grass, succeed best, in stiff, wet soils. Sainfoin does well on soils the most bare, mountainous, and arid; lucerne and the trefoils, (or clovers,) only attain the perfection of which they are susceptible, in warm, dry, calcareous earth.

10th. The ameliorating quality of tap-roote plants is supposed to be in proportion to their natural duration; annual clover, (lupinella,) has less of this property than biennial, (Dutch clover,) biennial less than sainfoin, and sainfoin less than lucerne.

11. Any green crop ploughed into the soil, has an effect highly improving, but for this purpose, lupins and buckwheat, (cut when in flower,) are most proper.

12th. Mixed crops (as Indian corn, pumpkins, and peas and oats) are much and profitably employed, and with less injury to the soil than either corn or oats alone.†

Silk Business in New England.

The *Northampton Silk Company*, incorporated with a capital of $150,000, promises to do much for the advancement of the Silk business, as well as for the prosperity of this town. We are glad to learn that the Factory building, one hundred feet long and four stories high, near the old Oil Mill, has been recommenced, and will be pushed ahead with great rapidity. It is intended to have the walls up this fall and perhaps occupied with Silk Machinery during the approaching winter. Mr. Samuel Whitmarsh surely is worthy of praise for the untiring perseverance he has exhibited in pushing forward this important enterprise, in opposition to the obstacles which have constantly beset him. Not merely have the unpropitious times discouraged, but the incessant prediction of croakers, that his plans would not succeed, have constantly assailed Mr. Whitmarsh. All new enterprises meet with the same hindrances, and if energetic men stopped to heed all the wise admonitions of the sceptical, what would be accomplished? Mr. Thomas Whitmarsh and brother have purchased the old Carriage Shop near South Street Bridge, and are preparing to fill it with machinery for weaving Ribbons and Sewing Silk. A Steam Engine will propel the machinery, and we predict one year hence, more spindles and silk looms will be in operation in this town, than in any other two places in the Union.—*Northampton Courier.*

The Boston Gazette has the following notice of specimens of Silk exhibited at the Fair of the Mechanic's Institute, recently held in Boston.

Who, fifteen or twenty years ago, would have thought of Silks, made from the product of worms fed upon our own soil, and tended by our own people? Yet here they lie, beautiful specimens of various kinds of manufacture—showing our capacity for enterprise; and our power to triumph over difficulties.

No. 301, is a most capital specimen of sewing silks and twist. They are of varrious colors, and of different degrees of fineness. The Italians long held supremacy in the manufacture of sewings, till, for strong, even silk, English manufacturers bore away the palm. Better silk than the specimens here displayed by our Yankees, we have never seen, from any country; it is even and soft, the fancy colors are clear and elegant, and the blue-black, in every respect, is an article not to be excelled in any market in the world. Included in the same number are specimens of black silk vestings, and one of black *satin*, surpassingly glossy, thick and rich. It reminds us of the old fashioned, heavy satins of France and Switzerland, which once composed the petticoats of our great grand-mothers. These are all from the manufactory of the *Northampton Silk Company.*

No. 117. Silks for pantaloons and vests, watered and plain drab—handkerchiefs with printed borders, or filled through the centre with high colored figures, and printe l silk for gowns, are found of an excellent quality. Owing to some defect in the gum dressing, they do not appear so soft as desirable, but the cloth is even, strong, glossy, and heavy, and they will wear almost forever; the specimens show a gratifying progress in the art of manufacturing, by a people who cannot be agricultural, and who owe their prosperity to a spirit of bold enterprise, in wresting from the great deep its richest treasures. They are sent to the Fair by the *Atlantic Silk Company of Nantucket.*

No. 467. Handkerchiefs, upon India silk, are beautifully printed in various patterns by the *Essex Printing Company.* Being sent merely as specimens of printing we need not here speak of the quality of the cloth.

No. 124. Fine, heavy, soft, glossy, well woven half hose, black and white, appear tempting indeed. We regret to learn that the manufacturer, who commenced this business early in the history of our silk manufacturing, abandoned it some time since; though he still prosecutes the business of stocking weaving. We trust he will again turn his attention to silk, and hope he will find it profitable. These samples are entered by *Ephraim Harrington* of Boston.

No. 62. The finest, softest, and highest finished silk cloth may be seen in samples of handkerchiefs, manufactured by *Adam Brooks* of South Scituate, and bleached and printed by *J. W. Halliday* of Lynn. They resemble the finest specimens of French and Swiss silk, and are highly creditable to the manufacturer. Mr. Halliday has also sent a piece of well printed cotton handkerchiefs, which, with the silk, show him to be an acomplished printer.

From the New England Farmer.

Discovery of Marl.

Mr. Fessenden—*Dear Sir:*—I have often thought when reading the description of Marl, and its value as a manure, that if we could find it in this part of the country, it would be an inexhaustible source of wealth to the farmer. I little thought that we had it at our doors.

Four years ago this fall, I hired an old Irishman to ditch for me, and in clearing out an old ditch—a spit down lower than it had been dug before,—as I stood looking at him one day, he cried out, "Oh massa! here is as fine marl as was ever seen at home; if you let this lay in a heap until next spring, and spread it on your grass land, you will have such grass as you never see in all your life."

He then went on to relate to me how he first discovered it when he was a boy on his mother's farm in Ireland. He said he went and told his mother, and asked her if they should go and dig some, and she said, "no Billy, say nothing about it until I see my landlord." Away she went and told him that her farm was so poor that she must leave it, that she could not pay the rent. But he wished her to remain on it, and would give it to her at a less rent, and she gave up her old lease, and took a new one for 21 years. She came home, and says, "now, Billy you may go and dig marl," which I did, and made all the upland very rich.

The marl in the bottom of my peat meadow, is from two to three feet deep. I have tried it with acid, and find it ferments like putting salæratus to cider. I dug out a quantity of this four years since, and tried it on my corn lands, and I thought it had a great effect; and on a gravelly knoll, which was perfectly sterile before; since which, it has borne grain, and produced considerable grass.

Labor here has been so high and scarce, that I have not dug any untill this fall. I am now getting out a large quantity of it. Whether this can be found in all our peat meadows, I am not able to say; but one thing I am certain of, that it is an object for all our farmers that have these lands that are now lying useless, a dead weight upon the owner, a receptacle for snakes, frogs, and other useless reptiles, to try the experiment. If they fail of finding marl, they will find a plenty of peat mud, and if it remains in heaps until next spring, for the frosts to operate upon, they will find it in an excellent condition for their corn lands next summer. Where I had heaps of it lay last winter, the corn has grown this summer as luxuriantly as under a dung heap.

The season is now right to go to work on this land, and the meadows are dry. Irishmen are very plenty, and may be hired at almost any price you will offer them. Now, Sir, if our farmers will go to work and drain these extensive bogs, which are every where interspersed in this part of the country, and set those poor, half-starved Irishmen to work and get out this inexhaustible source of manure for their light sandy and gravelly soils, and reclaim their bog meadows, our happy New England will no longer be branded with the stigma of the sterile soil of N. England, but may immediately be made to appear (as Morse's Geography said of the State of Connecticut,) like a well cultivated garden. They will soon find if they will be kind to these foreigners, and set them to work, instead of their becoming a curse to our country, and filling our poor establishments with inmates, they will become a blessing, and we shall no longer be obliged to send our sons to the far west, to drag out a miserable existence among the half savage, dissipated inhabitants of the western wilds, in search of good land; for I am of opinion that our bog meadows which are now worth nothing, are equally as good as the prairies of the west. Travelers tell that the soil is four feet deep; why, Sir, I have some land that the soil is twenty feet deep, and all the way down, heaps of decayed vegetation, all of it fit food for planting.

Yours with respect,

BENJ. WHEELER.

The Farm-Yard.

No subject of rural economy is of greater importance than the judicious disposition of the out-buildings of a farm; yet there is, perhaps, less consideration bestowed on this point than on any other. It is obvious, to the most common observer, that the size of the various out-houses ought to be regulated by the extent of the farm, and also by that branch of husbandry which is carried on.

In a dairy farm, there are fewer buildings requisite, than in any other department of agriculture; but it is, nevertheless, highly necessary to have distinct buildings for the various sorts of cattle; and the whole of these should be so distributed, as to facilitate the labor and convenience of the laborers.

Further, to promote this object, the whole of the buildings should, if possible, be placed within the same inclosure. The yard in which they are situated should also be secured against all outward access; if the buildings are not so connected as to form a complete inclosure, the spaces between them should be filled up with wall, or high paling, and the yard should be closed by solid gates.

Where chalk can be commanded, the surface or bottom of the yard should be bedded or coated with it, or with some other material impenetrable to water; by which means the moisture, in the smallest degree, will be effectually prevented, and consequently a great saving obtained in the article of manure. The construction of the yard should be nearly concave, or shelving to the centre, in order to collect the drainage.

In order to avoid this expense, which is, in fact, very trifling, most farmers bottom the yards with

* Spring wheat and rye form exceptions to this rule, as they will mature in four months.—*Ed. Farmer and Gardener.*

† The good effect of these mixtures was known to the ancients, from whom the practice has descended to us. What a picture of fertility and abundance have we in the 22d chap. 18th book of Pliny's Natural History: "Sub vite seritur fumentum, mox legumen, decinde olus, omnia, eodem anno, omnaque oliena umbra aluntur."

earth, or rubbish, to absorb the drainage, and thus form a compost in the yard itself. This saving, even were it larger, can be of no importance in comparison with the injury done to the store cattle by thus retaining the moisture underneath them.—Dryness of situation is of the most essential consequence to their health, and indispensable to their thriving.

The driest bottoming is furze; but stubble, potatoe tops, or any other loose refuse, will answer the purpose; over which the yard should be bedded deep in straw. Earth, though most valuable in a compost, should never be used within the yard. Of the principal offices requisite to a farm, we now proceed to give an outline.

Ox-Stalls or *Feeding-Houses.*—The structure of these buildings is very simple. It is requisite, that each interval, or stall, should not only be provided with a crib, for dry food, but there should also be, in the centre of each, a trough, for the reception of water, which may be conducted into them by means of tubes leading from the pump. The *size* must depend upon the manner in which the farm is occupied; but it ought never to be forgotten, that the beasts should have *ample accommodations.*

In order to erect feeding houses to advantage, great attention should be bestowed on their situation. They ought to lie dry, and not be exposed too much to the sun, or to the heat of the weather. It will be advisable to lay the floors in a gently sloping direction, with proper drains, and also for the more easy removal of the litter.

The floors are variously paved. By some it has been recommended to have the pavement of stone pitched; but the least expensive method is to lay the floor with bricks. The doors also should be so hung as to open outward, by which means a waste of room will be prevented, and the sheds will be rendered more secure against intruders. Their safety will also be greatly increased by hanging them with a fall to the catch.

The *width* of stalls is various. For two middle-sized working oxen, *seven* feet has been found sufficient, and *nine* feet for those of a larger size.—Cows require equal, if not more room for the convenience of milking them, and it is always best to place them in single stalls. The stalls should not be made too wide, lest the cattle turn round in them, for thus the stronger beasts would have an opportunity of injuring their weaker fellows. This danger may be avoided, by placing a post in the middle of the stall, immediately before the shoulders of the cattle.

Where the system of stall-feeding is adopted on a large scale, it will be necessary that there be a *regular temperature* maintained. Otherwise the confined respiration of many animals must necessarily tend to generate disease. Hence, though a loft may be built over the stalls for the reception of provender, a funnel may be passed through it from the ceiling of the feeding-house to the roof, which will allow of the escape of the foul air.

It will also be advisable to construct latticed windows, or apertures, at a considerable distance from the ground, at the gable-ends of the feeding-houses, and to supply them with shutters, which may be closed or withdrawn as the season of the year, or the temperature of the weather, may render this necessary. Where it is practicable, such openings should be towards the north or east, in order that they may derive some benefit from the genial rays of the morning sun, and from the cooler air of the day in summer. The large front doors may sometimes be set open for the purpose of further ventilation.

Various modes are employed for securing cattle in their stalls, but when the common method of tying-up is insufficient for the security of vicious beasts, the following will be found to answer the purpose:—A fixed iron chain, by way of a halter, should be fastened to a *standard*, mortised into the front side of the manger and the joist above.

It is composed of two parts: one of these has sixteen links, and is two feet in length, measuring from the staple; the other, which contains twenty-six links, measures about thirty-nine inches, and serves as a collar. At one end of this *collar-chain*, there is a ring, about one inch in diameter, and at the opposite extremity a key, three or four inches in length, having a hole at its middle, by which it is joined to, and freely plays in the last link.

The first chain, which by one end is fixed to the manger, is by the other linked into a middle link of the collar-chain, and thus forms two arms, which, being thrown round the neck of the beast, and the key being thrust through the ring, and placed at a bar across it, makes a very secure fastening.

Among the smaller buildings of a farm, not the least worthy of notice is a *cart* and *tool-house*, for the reception of the wagons and implements, which, when not actually employed, are often heedlessly left on the spot where they are last used.

An open spot, free to every wind should be selected. The roof ought to be supported on pillars, high enough to admit a loaded wagon, and containing lofts for the care of light implements, sacks, or other small spare articles. But as the only object is to preserve the carriages and tools from the effects of wet, this can be attained by mere sheds, the most economical mode of erecting which, is to project a roof from the back of a barn or stable.

Calf-Pens.—In most parts of this country, it is the practice to appropriate a part of the cow-house to the reception of calves; a measure which cannot fail of producing uneasiness among the cows, which often withhold their milk in consequence of the bleating of the young animals. It is preferable to have the pens at such a distance from the feeding-house, that the cows cannot hear them.

The construction of these buildings is so simple, and so well known, that a particular description is deemed unnecessary. They should be latticed, so as to admit fresh air, as a moderate and rather cool temperature ought at all times to be kept in calf-pens. Light should be excluded, as darkness inclines all animals to rest, and the quicter calves are kept, the better they will thrive. The strictest cleanliness should also be observed, and every attention paid to keep them dry and sweet.

If possible, they should open either into the stack-yard, or the orchard, or some small and quiet enclosure, in order to afford an opportunity of occasionally turning out calves that are intended to be reared. When the profit arising from the rearing of swine is duly considered, it will be admitted, that the rearing of a *Piggery* demands nearly as much attention as a dairy.

A piggery should be in a circle, or it must fail in convenience. According to this idea, in the centre there should be the boiling or steaming house, with a granary for corn, meal, &c. Around this a range of cisterns ought to be disposed, in divisions, for receiving immediately from the steam apparatus, and also by tubes from the granary.

Around these should run a path, then a fence or paling, in which are the troughs, with hanging lids, for supplying food directly from the cisterns, on one side, and for hogs feeding on the other. A range of yard next. The potato stores, or *pyes*, should at one end point near to the entrance, and water must be raised to the coppers and cisterns at once by a pump; a trough, or other conveyance from the dairy to the cisterns, for milk, whey, &c.

An arrangement like this, would be very convenient, while the expense attending it would be inconsiderable. Great profit might be derived, by setting apart a plot of natural or artificial grasses, into which the swine might be turned at pleasure. those who do not possess a convenient pig apparatus, can have little idea of the great use of it in making manure. This alone becomes an object, that would justify any good farmer in going to a certain expense, for attaining so profitable a part of what ought to be his farm-yard system.

This plan, however, is calculated only for those farms where the fattening of swine is carried on extensively. Where these animals are kept chiefly for domestic consumption, it will be sufficient if hog-sties be constructed with due regard to warmth and dryness, and divided into various partitions for the reception of swine, according to their age and varieties.

Each division should be between six and seven feet in width, of such height as the largest pigs can conveniently enter, and should be provided with a small space sufficiently capacious for holding the feeding-troughs.

If possible, troughs should be so arranged, that offal, milk, &c. may be conveyed into them from the milk-house, or scalding-house, by means of pipes; and as these animals often thrust their feet into the troughs, and thus waste a considerable portion of food, this may be avoided by fixing sticks in a frame over the troughs, not unlike a rack; or a thin piece of plank may be nailed on the back part of the troughs, and so project as to allow their heads only to enter.

This object may also be attained when swine are put up to fatten on dry food, by fixing a conical hopper (holding any given quantity) in a trough with the broad end upwards, and covered with a strong lid. At the lower end should be an aperture for giving out the meat into the trough, where the animal may eat it as it falls, without being capable of spoiling or wasting any portion of it.

By adopting the expedient here suggested, the further advantage will be derived in fattening swine, that, by feeding more leisurely than in the common mode, their food will probably be more thoroughly masticated; the effect of which has been thought to render their fat more firm, and of a better flavor.

Root Houses are buildings, the utility of which, on those farms where the system of stall-feeding is adopted, is very great. They should adjoin the feeding-house, and be provided with a *steamer*, for the purpose of preparing the vegetables for the use of the cattle. This simple machine, in fact is indispensably necessary on all farms where the feeding of cattle is conducted to any extent, and will not be found useless even on those in which it is not an object of attention.

An apparatus for steaming consists of a brick or stone stove, about three feet in every direction, in which is fixed a pot or kettle, six or eight inches deep, and eighteen or twenty inches in diameter.—Over this boiler (when about half full of water) is placed a hogshead, or cask, the bottom of which is perforated with numerous holes, about an inch in diameter, so that the steam may freely pass through the roots.

The top of the cask is usually left open, which might more advantageously be covered with a thick coarse cloth. The cask may either be removed by a rope and pulley, suspended from the ceiling, or it may be turned over when the roots are sufficiently steamed.—*Farmers' School Book.*

Ripening of Corn and Ploughing of Green Crops for Manure.

In proportion as the fecundated ear increases in magnitude, the leaves near the root begin to grow yellow and dry in consequence of the stem drawing from them the carbonaceous materials which they contain. As the growth advances, the base of the stem becomes yellow and dry in its turn, while the upper part remains green, and continues to nourish the ear.

The beautiful researches of M. Biot, afford interesting explanations of several agricultural practices hitherto not well understood, at least in a scientific point of view. For example, when the base of the stem begins to become yellow and dry, if the corn be then cut down, though the grain is not ripe, it will continue to be nourished at the expense of the green matter in the upper part of the stem, almost, if not quite as well, as if it had remained uncut, and will thus ripen well; while having been thus cut down early, much loss from shaking is prevented, besides the chance of loss by *lodging* from heavy rain and wind. M. Biot's experiments, from his well known high character for rigid accuracy, are, therefore, well calculated to give farmers confidence in cutting down their corn, as soon as the lower leaves and the lower part of the stems are yellow and dry, though the upper parts be green.*

* It is a good practice to cut down every kind of grain before it is fully ripe in the grain or the straw, and that for the reasons just enumerated in the text. But, as M. Biot's observations and common practice do not exactly agree as to the symptoms which determine the time of cutting, it is as well to note the difference. In a *fine season*, farmers cut down when they find the neck of the straw immediately under the ear free of juice, when twisted round between the finger and thumb; and do not wait until the lower part of the stems are yellow and dry, because they find in such a season the straw *to die from the ear downwards*. This fact, we conceive, does not militate against M. Biot's *theory*, for as the absorbing power of the ear at the top of the stem is always powerful, it must be the more powerful the nearer the ear approaches maturity, and of course the part of the stem nearest the ear should first become dry. In a bad season, on the other hand, the lower part of the stem first becomes yellow and dry, after which, of course, the crop is not allowed to stand; for, in such a season, the ear never becomes mature, having, of course, less absorptive power, whilst the vitality of the root is destroyed by the continued effects of bad weather and the ungenial state of the soil.—*Ed. Farmer and Gardener.*

Again, as the leaves and stems of plants while green, contain sugar and other carbonaceous materials for nourishing the seeds and bringing them to maturity, it follows that, if they are in this state ploughed down into the soil, they must greatly enrich it with all the products ready prepared for the nourishment of plants.

It has been proved, indeed, by other experiments previous to those of M. Biot, that the leaves and all the green parts of plants decompose the carbonic acid gas of the ear, appropriating the carbon, and setting free the oxygen; hence it has been inferred, that the carbon thus derived contributes to form their mass of sugar and gum, additional to the sap absorbed from the soil by their roots. This view is corroborated by the difference which M. Biot has shown between the composition of the leaves of wheat and the stem, which is more especially supplied from the soil. If then, a portion of the solid frame work of plants is derived from the air in the form of carbon, the ploughing down of green crops for the purpose of manure, gives to the soil more than the plants, while growing, had extracted from it.

We may well conclude with M. Biot, that "every positive determination in science is susceptible of progress and of useful application, though these may be distant. A microscopical observation, or an optical property, which at first appears only curious and abstract, may thus in time become important to agriculturists and manufacturers."—*Quarterly Journal of Agriculture.*

Fly in Turneps.

Mr. *John Birkett*, in a letter published in the Carlisle Patriot, gives the following recipe as being preventive of the ravages of the turnep fly:

"To a quart of turnep seed add one ounce of brimstone finely powdered, putting both into a bottle large enough to afford room to shake them well together, for four or five days previous to sowing; keep the bottle well corked."

In addition to the above, we believe it would be found useful, just at the moment when the turneps are coming up, to sow in the proportion of 4 lbs. to the acre, of flour of sulphur; this should be sown early in the morning, when the dew is on, so that the powder may adhere to the leaves of the plants.—We question whether sufficient of the scent of the baimstone would be communicated to the plant from the process of managing the seed recommended by Mr Birkett; but we do believe, that by combining his plan with the subsequent sowing on the plants here allluded to, after they come up, that they would be entirely repulsive to the appetites of these destructive insects. Another good would be effected by the operation, as the sulphur is a most powerful manure, and possesses in an eminent degree the power of attracting moisture from the atmosphere, a thing in which turneps delight, and which could not fail to promote their growth.

From the Maine Farmer.

Side Hill Plough.

Mr. Holmes: I have for some time past felt desirous to call your attention and the attention of the agricultural community to the Side Hill Plough. There are several kinds of ploughs so called, but I mean that with a rolling share and mouldboard.—You doubtless have seen them and perhaps know much better how to estimate their valne than I—but what I have seen of them and the use I have made, and the experience of others much better qualified to judge of their worth than I, have convinced me that they ought to take the place of all other ploughs, as possessing all the good properties of the best cast iron ploughs, to which is to be added those of turning the furrow to either the right hand or the left.

They are not patented. They are manufactured by a Mr. Nourse of Worcester, Mass., and were introduced into this town by Samuel Davis, Esq.

There are now in, and within 2 or 3 miles of this village, two dozen or more of them in actual use, and I believe every man who has tried them is entirely satisfied with them, and has either gotten one for his own use or is determined to have one the first opportunity.

They are not only applicable to the side hill, but equally so to level grounds, entirely superceding the necessity of a central or dead furrow. I have had my ploughing done for two years past with this kind of plough, and I do not hesitate to say that the ploughing has been as well done as it could have been done with any other plough in use.

I held the plough one-half day to break up land that had been mowed about five years. One yoke of oxen was all the team necessary. The work was done with ease to the cattle, and the man who owned the cattle and who drove them for me, has since purchased one of the ploughs for his own use.

One of our citizens contracted to build, and built a new road of about one mile on the shore of a pond where he was under the necessity of ploughing upon one side of the road altogether—he purchased one of these ploughs on purpose, and now says, he more than cleared the price of it in the time of his team and hands which would otherwise have been spent in traveling without ploughing. Much more might be said in favor of these ploughs, but my only object is to call the attention of those farmers who are about purchasing ploughs to do their fall ploughing. To such I would say—don't purchase until you have seen and are satisfisd. All that will be necessary to satisfy you will be to try, and I am certain you will buy.

They need no more recommendation in this vicinity—there will be very few other ploughs used in one or two more years.

Yours, very respectfully,

A Friend to Agriculture.

Mt. Vernon Village, Sept. 8, 1837.

Sept. 17, 1837.—I am this moment informed that Mr. Davis has sold 10 of the above ploughs within one fortnight.

Ram Sheep of the pure Kent Breed.

MR. RICHARD GOORD, of Twade near Sittingbourne, Kent, England, having devoted a long life in an endeavor to form a breed of Kent Sheep, (as Bakewell and Ellman have done with the Leicesters and Southdowns,) that should, with great size, combine all the desirable qualities, such as symmetry, hardihood of constitution, propensity to fatten, wool in quantity and of fine quality, &c., so far succeeded as for many years to carry off the prizes at the annual stock shows in Kent, when about two years ago, it being considered that he had, by bringing this breed to such perfection, conferred so great a benefit upon the community at large, a subscription was entered upon by the nobility, gentry, and others, and a most splendid vessel of embossed silver, (that I believe would contain from nine to ten gallons,) mounted on feet, with a handsome and most flattering inscription, was presented to him at a public dinner given for that purpose.

The carcass of this stock, at twenty months old, after being skinned and cleaned, commonly weighs from sixteen to eighteen stones, of 8lbs. to the stone, or 144lbs. When I left Sittingbourne last May, I selected a fine Ram, of the above breed, perhaps the largest sheep with such a combination of good qualities, that ever crossed the Atlantic and have it now on my farm (lately belonging to Mr. Jacob Pound) at Pittsford, where those desirous are welcome to see him, and may if they please send a few ewes this season at one dollar per head.

S. W. SHOTTER.

Pittsford, Monroe County, N. Y.

Oct. 3, 1837. 13t*

South Down Sheep.

THE subscriber has for sale a few half-blood South Down Tup Lambs, descended from the imported stock of Caleb N. Bement, of Albany.

S. PORTER RHOADES.

Skaneateles, Onondaga Co. Sept. 25, 1837.

sept 30-t4t

Chinese Mulberry--Morus Multicaulis.

WARRANTED genuine, and the most approved varieties for feeding Silk Worms; among which are the Manilla and Canton Multicaulis, with roots of one, two and three years old.

Also, CUTTINGS, and the Canton Seed bearing tree.—Multicaulis, Asiatic, Chinese, Smyrna and Brussa SEEDLING TREES, may be had at the usual prices, and selected from the Agricultural and extensive Mulberry Nurseries in Northampton, Mass. and vicinity—securely packed and delivered at the Nursery, or forwarded to Boston, Hartford, New-Haven, New-York, Albany, Rochester, Buffalo, Cleveland, Charleston, Savannah, Mobile, St Louis, or any other place within the United States, conformable to order. Some of the above are considered as peculiarly adapted to sustain our hard winters.

Autumn being the best season for removing the trees, letters addressed to the subscriber, post paid, will be promptly attended to, with instructions for management.

D. STEBBINS, *Sec'y Ag. Soc'y.*

Northampton, Sept. 1, 1837.

N. B. Orders for the above (if made in season to be forwarded by the Canal,) will be received by GEORGE W. HARWOOD, No. 20, Buffalo street, Rochester.

sept 30-f3t m2t

Morus Multicaulis.

THE subscriber can furnish large and small quantities of the genuine Chinese mulberry, or Morus multicaulis trees of the most thrifty growth and matured wood. The trees are from two to six feet in height, and will be sold at the lowest prices, in proportion to their size. They will be packed so as to insure safe transportation to any part of the United States. Orders for not less than one hundred will be delivered in New York or Philadelphia, or shipped from thence or from Hartford. October and November are the best months for transportating to the South and West.

SILK WORM'S EGGS, of three varieties, White or Two Crop, Sulphur, and Orange colored. Silk Reels, Brook's Silk Spinning Machines, White mulberry seed, &c. &c.

WM. G. COMSTOCK.

Hartford, September, 1837. sep 23-f6w

Chinese Mulberry Trees. &c.

THE subscribers will supply, at reduced rates, the following trees:

200,000 Chinese Morus Multicaulis, of various sizes, at the lowest prices.

20,000 New Chinese Morus Expansa, a seedling variety from the Morus Multicaulis, with very large succulent leaves, remarkable for the quantity of nutritious matter. They are engrafted on the White Mulberry, and are hardy enough for the most northern climates, and possess all the advantages of the Morus Multicaulis. These are six feet and upward in height.

3,000 New Hybrid Morus Multicaulis with large leaves and close joints, and 6 to 7 feet in height and very hardy.

100,000 Florence Mulberry, with entire leaves, in which point they differ from the common White Mulberry. These, are imported direct from the best silk districts of France, and are 1 1-2 to 2 1-2 feet in height, and will be sold at very low rates.

50,000 Italian White Mulberry, at very low prices.

Also, 100 lbs. White Mulberry seed.

1000 lbs. yellow and white Sugar Beet seed.

*P*riced catalogues of Fruit and Ornamental Trees, Green House plants, Bulbous Flower Roots, splendid Dahlias and Garden, Agricultural and Flower seeds sent gratis to every applicant.

Orders sent us per mail will receive immediate attention, and forwarded as ordered. Linnæan Garden, Flushing.

WM. PRINCE & SON.

N. B. Companies or individuals desirous to contract for large numbers of Trees, will be dealt with on very liberal terms. sep23

Improved Stock.

THE subscriber has now for sale at his farm, 3½ miles west of the city of Albany, the following choice animals.

Durham Short Horns.

4 Bulls of the Improved Durham Short Horns, from 4 months to 7 years old.
6 Cows and Heifers, from 1 to 11 years old.

Sheep.

8 Pure South Down Tup Lambs.
4 do. Hampshire do. do.
6 Hampshire, crossed with the Bakewell.
1 yearling South Down.
1 do. Hampshire do.
3 do. Bakewell do.
2 Two year old do.
20 Bakewell Ewes.
8 do. do. yearlings.
9 Ewe Lambs, crossed with the Hampshire.
7 Selected Merino Bucks, descended from the stock imported by the late Col. Humphrey of Connecticut.

Applications per mail, [post paid,] will be punctually attended to. CALEB N. BEMENT.

Three Hills Farm, near Albany, Aug. 30, 1837. f6w

ELECTION NOTICE.—*Sheriff's Office, Monroe County, Rochester, August 8th,* 1837.—A General Election is to be held in the county of Monroe on the 6th, 7th and 8th days of November next, at which will be chosen the officers mentioned in the notice from the Secretary of State, of which a copy is annexed. ELIAS POND, Sheriff.

State of New-York, Secretary's Office, Albany, August 1st, 1837.—Sir: I hereby give you notice that at the next General Election in this State to be held on the 6th, 7th and 8th days of November next, a Senator is to be chosen in the Eighth Senate District in the place of Albert H. Tracy, whose term of service will expire on the last day of December next.

JOHN A. DIX,
Secretary of State.

To the Sheriff of the County of Monroe.

N. B. The Inspectors of Election in the several towns in your county will give notice of the election of Members of Assembly, and for filling any vacancies in County offices which may exist. aug 8-arf

Berkshire & Lincolnshire Pigs for sale.

I HAVE a considerable number of late Spring and Summer Berkshire Pigs, crossed with the Lincolnshire, for sale at Whitney's Distillery in the city of Rochester. The character of the Berkshire breed is somewhat known in this country. I believe the Lincolnshire is but very little, if any. I consider the above cross superior to any breed of hogs in America. I have a pig of the above breed that was four months old the 20th of this month. It was put in a pen alone seven weeks ago, it has been well attended to, the result is that the pig gained from 9 to 11 pounds per week.

P S The Lincolnshire breed was imported by Gov. Maitland of Upper Canada. AMOS SAWYER.

Rochester, Aug. 26, 1837. aug 26-t7tr3t

The following article from the Cincinnati Chronicle, bears upon it the impress of poetic inspiration. It shows how easy the pencil of genius can hallow the most trifling subject. The pen of no ordinary mind could have imparted to a *linen rag*, the playful dignity which Mrs. Sigourney has thrown around it. There will be few objections to literary ladies, if their "shreds of linen" always receeive so beautiful an apotheosis.—*Jour. of Com.*

TO A SHRED OF LINEN.

Would they swept cleaner!—
Here's a littering shred
Of linen left behind,—a vile reproach
To all good housewifery. Right glad am I,
That no neat lady, trained in ancient times
Of pudding making and of sampler work,
And speckless sanctity of household care,
Hath happened here to spy thee. She no doubt,
When looking through her spectacles, would say
"This comes of reading books"—or some spruce beau,
Essenced and lilly-handed, had he chanced
To see thy slight superficies, 'twould be,
"This comes of writing poetry." Well—well—
Come forth offender!—hast thou ought to say?
Canst thou by merry thought, or quaint conceit
Repay this risk, that I have run for thee?
———Begin at alpha, and resolve thyself
Into thine elements. I see the stalk
And bright blue flower of flax, which erst o'erspread
That fertile land, where mighty Moses stretched
His rod miraculous. I see thy bloom
Tinging, tho' scanty, these New England vales.
But, lo! the sturdy farmer lifts his brake
To crush thy bones, unpitying—and his wife,
With kerchiefed head, and eyes brimful of dust,
Thy fibrous nerves, with hatchel tooth divides.

———I hear a voice of music—and behold,
The ruddy damsel singeth at her wheel,
While by her side the rustic lover sits.
Perchance, his shrewd eye secretly doth count
The mass of skeins, which hanging on the wall
Increaseth, day by day. Perchance his thought,
For men have deeper minds than women—sure!
Is calculating what a thrifty wife
The maid will make, and how his dairy shelves
Shall groan beneath the weight of golden cheese,
Made by her dextrous hand—while many a keg
And pot of butter to the market borne,
May transmigrated, on his back appear,
In new Thanksgiving coats.
Fain would I ask,
My own New-England, for thy once loved wheel,
By sofa and piano, quite displaced—
Why dost thou banish from my parlor hearth
That old Hygean harp, whose magic ruled
Dispepsia, as the minstrel shepherd's skill
Exercised Saul's ennui? There was no need
In those good times of trim Callisthenics,
And there was less of gadding—and far more
Of home-born, heartfelt comfort, rooted strong
In industry, and bearing such rare fruit,
As wealth might never purchase.
But come back
Thou shred of linen. I did let thee drop
In my harangue—as wiser ones have lost
The tread of their discourse. What was thy lot
When the rough battery of the loom had stretched
And knit thy sinews, and the chimist sun
Thy brown complexion bleached.
Methinks I scan
Some idiosyncracy, that marks thee out
A defunct pillow-case. Did the trim guest
To the best chamber ushered, e'er admire
The snowy whiteness of thy freshened youth
Feeding thy vanity!—or some sweet babe
Pour its pure dream of innocence on thee?
Say, hast thou listened to the sick one's moan,
When there was none to comfort?—or shrunk back
From the dire tossing of the proud man's brow?
Or gathered from young beauty's restless sigh,
A tale of untold love?
Still, close and mute!—
Wilt tell no secrets, ha? Well then, go down
With all thy churl-kept hoard of curious lore
In majesty and mystery, go down
Into the paper mill, and from its jaws
Stainless and smooth, emerge. Happy shall be
The renovation, if on thy fair page
Wisdom and truth, their hallowed lineaments
Trace for posterity. So shall thine end
Be better than thy birth, and worthier bard
Thine apotheosis Immortalize.

L. H. S.

The Grand River (Michigan) Times mentions onions raised by Mr. Wonsey from seed, most of which on an acre are two feet high—some three feet—with proportionate bottoms.

Climate of Europe and America Compared.

It is almost a matter of course to decry the climate of England. The English writers themselves talk of the *suicidal months*, and it is the only country where part of the livery of a mounted groom is his master's great coat strapped about his waist. It is certainly a damp climate, and the sun shines less in England than most other countries. But to persons of full habit, this moisture in the air is extremely agreeable; and the high condition of all animals in England, from man downwards, proves its healthfulness. A stranger, who has been accustomed to a brighter sky, will at first, find a gloom in the gray light so characterestic of an English atmosphere; but this soon wears off, and he finds a compensation, as far as the eye is concerned, in the exquisite softness of the verdure, and the deep and enduring brightness of the foliage. The effect of this moisture on the skin is singularly grateful. The pores become accustomed to a healthy action, which is unknown in other countries; and the bloom by which an English complexion is known all over the world, is the index of an activity in this important part of the system, which, when, first experienced, is almost like a new sensation. The transition to a dry climate, such as ours, deteriorates the condition and quality of the skin, and produces a feeling, if I may so express it, like that of being *glazed*. It is a common remark in England, that an officer's wife and daughters follow his regiment to Canada at the expense of their complexions; and it is a well-known fact that the bloom of female beauty is, in our country, painfully evanescent.

The climate of America is, in many points, very different from that of France and Great Britain. In the Middle and Northern States, it is a dry, invigorating, bracing climate, in which a strong man may do more work than in almost any other, and which makes continual exercise or occupation, of some sort, absolutely necessary. With the exception of the 'Indian summer,' and here and there a day scattered through the spring and the hot months, there is no weather tempered so finely that one would think of passing the day in merely enjoying it; and life is passed, by those who have the misfortune to be idle, in continual and active dread of the elements. The cold is so acrid, and the heat so sultry, and the changes from one to the other are so sudden and violent, that no enjoyment can be depended upon out of doors, and no system of clothing or protection is good for a day together. He who has full occupation for head and hand, (as by far the greatest majority of our countrymen have,) may live as long in America as in any portion of the globe—*vide* the bills of mortality. He whose spirits lean upon the temperature of the wind, or whose nerves require a genial and constant atmosphere, may find more favorable climes; and the habits and delicate constitutions of scholars and people of sedentary pursuits generally in the United States, prove the truth of the observation.

The habit of regular exercise in the open air, which is found to be so salutary in England, is scarcely possible in America. It is said, and said truly, of the first, that there is no day in the year when a lady may not ride comfortably on horseback; but with us, the extremes of heat and cold, and the tempestuous character of our snows and rains totally forbid, to a delicate person, any thing like regularity in exercise. The consequence is, that the habit rarely exists, and the high and glowing health so common in England, and consequent, no doubt, upon the equable character of the climate in some measure, is with us sufficiently rare to excite remark. 'Very English-looking,' is a common phrase and means very healthy-looking. Still our people *last*; and though I should define the English climate as the one in which the human fame is in the highest condition, I should say of America, that it is the one in which you could get the most work out of it.

Atmosphere, in England and America, is the first of the *necessaries* of life. In Italy it is the first of its *luxuries*. We breath in America, and walk abroad, without thinking of these common acts but as a means of arriving at happiness. In Italy, to breathe and to walk abroad are themselves happiness. Day after day, week after week, month after month, you wake with the breath of flowers coming in at your open window, and a sky of serene and unfathomable blue, and mornings and evenings of tranquil, assured, heavenly purity and beauty. The few weeks of the rainy seasons are forgotten in these long halcyon months of sunshine. No one can have lived in Italy a year, who remembers any thing but the saphire sky and the kindling and ever-seen stars. You grow insensibly to associate the sunshine and moonlight only with the fountain you have lived near, or the columns of the temple you have seen from your window, for on no objects in other lands have you seen their light so constant.

I scarce know how to convey, in language, the effect of the climate of Italy on mind and body.—Sitting here, indeed, in the latitude of thirty-nine, in the middle of April, by a warm fire, and with a cold wind whistling at the window, it is difficult to recall it, even to the fancy. If I may make use of language used in a moment of passionate recollection,

My very spirit seemed to me't
As swept its first warm breezes by!
From lip and cheek a chilling mist,
From life and soul a frozen rime,
By every breath seemed softly kissed—
God's blessing on its radient clime!

I do not know whether life is prolonged, but it is infinitely enriched and brightened by the delicious atmosphere of Italy. You rise in the morning, thanking Heaven for life and liberty to go abroad.—There is a sort of opiate in the air, which makes idleness, that would be the vulture of Prometheus in America, the dove of promise in Italy. It is delicious to do nothing—delicious to stand an hour looking at a Savoyard and his monkey—delicious to sit away the long, silent noon in the shade of a column, or on the grass of a fountain—delicious to be with a friend without the interchange of an idea—to dabble in a book, or look into the cup of a flower. You do not read, for you wish to enjoy the weather. You do not visit, for you hate to enter a door while the weather is so fine. You lie down unwillingly for your siesta in the hot noon, for fear you may oversleep the first coolness of the long shadows of sunset. The fancy, meantime, is free, and seems liberated by the same languor that enervates the severer faculties; and nothing seems fed by the air but thoughts, which minister to enjoyment.

The climate of Greece is very much that of Italy. The Mediteranean is all beloved of the sun. Life has a value there, of which the rheumatic, shivering, snow-breasting, blue-deviled idler of northern regions has no shadow, even in a dream. No wonder Dante mourned and languished for it. No wonder at the sentiment I once heard from distinguished lips—*Fouri d' Italia tutto e esilio.*

This seems like describing a Utopia; but it is what Italy seemed to me. I will confess it is exaggerated, if an artist can be found who does not agree with me.—*Willis.*

Fine Sheep for sale

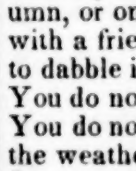
25 FULL Blood Saxon,
100 full blood Merino.
50 superior Bucks
100 Lambs, cross bloods.
300 Ewes, do. do.
300 Weathers, in fine condition.

The cross bloods are good Sheep and heavy fleece. The Merino and Saxon are equal to any sheep that can be produced. A credit can be given if required.

LEONARD THOMPSON.

East Bloomfield, Ont. co., Sept. 1837. sep9-13t

Monroe Horticultural Garden & Nurseries, Greece, Monroe Co., N. Y.



THIS establishment now comprises over 20 acres, covered compactly with Trees and Plants in the different stages of their growth.

The subscriber offers to the public a choice selection of Fruit Trees, of French, German, English and American varieties, consisting of Apples, Pears, Plums, Peaches, Cherries, Apricots, Nectarines, Quinces, Currants, Gooseberries, Raspberries, Grape Vines, Strawberries, Ornamental Trees, Shrubs, Plants, Hardy Roses, Vines, Creepers, Herbaceous Perennial Plants, Bulbous Roots, splendid Pæonies, Double Dahlias, &c. &c.

Also, a large collection of Green House Plants, of choice and select varieties, in good condition.

Orders respectfully solicited. Trees and Plants, when ordered, are carefully selected and faithfully packed, and if desired delivered on the canal one mile from the Nursery, or at Rochester.

Orders for Mr. Rowe's Nursery received by the publisher of this paper.

Catalogues will be sent to every applicant gratis, or may be had by calling at the office of the Genesee Farmer.

April 1, 1837. ASA ROWE.